UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/454,870	12/03/1999	SUJAL PATEL	REALNET.066A	4345

20995	7590	04/08/2004

KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER
COULTER, KENNETH R

ART UNIT	PAPER NUMBER
2141	14

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	09/454,870	PATEL, SUJAL	
	Examiner	Art Unit	
	Kenneth R Coulter	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _20 January 2004 (paper #13; Amendment D)_.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under _Ex parte Quayle_, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _See Continuation Sheet_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-6, 8, 11-13, 15-18, 20-22, 24-26, 28-33, 35, 37-45, 48-51, 55-57 and 61-76_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _11,13_.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 1-6,8,11-13,15-18,20-22,24-26,28-33,35,37-45,48-51,55-57 and 61.-76.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1, 3 - 6, 8, 11 – 13, 15 – 18, 20 - 22, 24 – 26, 28 – 33, 35, 37 – 45, 48 -

51, 55 - 57, and 61 - 76 are rejected under 35 U.S.C. 102(b) as being disclosed by

Blasbalg (U.S. Pat. No. 4,771,391) (Adaptive Packet Length Traffic Control in a Local

Area Network).

2.1   Regarding claim 40, Blasbalg discloses a method of aggregating data packets,

the method comprising:

determining, based upon the load of a server computer, whether to aggregate

one or more of the data packets into an aggregated data packet with a size, wherein the

size of the aggregated data packet exceeds a minimum threshold size without

exceeding a maximum threshold size, and therein the minimum threshold size or the

maximum threshold size is related to the load of the server computer (Abstract; Fig. 1;

col. 5, lines 5 - 15); and

transmitting the aggregated data packet to a client computer (Abstract; Fig. 1;

col. 5, lines 5 - 15).

2.2   Per claim 41, Blasbalg teaches that the data packets are not aggregated in an

aggregated data packet larger than the size of a maximum transmission unit for any

intermediary network device that is in the transmission path between the server

computer and the client computer (col. 5, lines 5 - 15).

2.3   Regarding claim 42, Blasbalg discloses determining the server load comprises

comparing the number of data packets that are overdue to the total number of data

packets (col. 6, lines 15 - 21).

2.4   Per claim 43, Blasbalg teaches determining the server load comprises comparing

the number of network events processed by a server program that is executing on the

server computer due to exceeding a time out threshold to the total number of network

events that the server program processes (col. 6, lines 15 - 21).

2.5   Regarding claim 44, Blasbalg does not explicitly disclose that *network events* are

selected from the group comprising: a play command, a pause command, a seek

command, a ping command, and a re-send command.

However, the ping command is inherent in Blasbalg because the analysis and tracking

of the network in Blasbalg.

2.6   Per claim 45, <u>Blasbalg</u> teaches that the server load is based at least in part upon

the actual transmission rate between the server computer and the client computer (col.

5, lines 5 - 15).

2.7   Per claim 51, <u>Blasbalg</u> teaches that the size of the minimum threshold relates to

a quality of presentation of the streamable data objects and the maximum threshold

relates to a *maximum transmission unit* (Abstract; col. 5, lines 5 - 15).

2.8   Regarding claims 1, 3 - 6, 8, 11 – 13, 15 – 18, 20 - 22, 24 – 26, 28 – 33, 35, 37 –

39, 48 - 50, 55 - 57, and 61 - 76, the rejection of claims 40 - 45 and 51 (paragraphs 2.1 -

2.7 above) under 35 USC 102(b) applies fully.

In addition, with regard to claims 15, 16 and 24, 25, <u>Blasbalg</u> discloses that the process

of transmitting the streamable data objects from server to client comprises increasing

the packet size of one or more data packets (Abstract; col. 5, lines 5 - 15), and either

increasing or decreasing the frequency of transmission of one or more data packets

(col. 4, lines 29 - 37); but does not explicitly disclose increasing the number of channels

that are used to transmit the streamable data objects,

The Examiner hereby takes official notice that this feature is commonplace in the

streamable multimedia art in order to increase the speed of transmission, and therefore

does not represent patentably distinct features over the prior art.

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in a patent granted on an application for patent by another filed in
> the United States before the invention thereof by the applicant for patent, or on an international
> application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section
> 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors

Protection Act of 1999 (AIPA) do not apply to the examination of this application as the

application being examined was not (1) filed on or after November 29, 2000, or (2)

voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined

under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C.

102(e)).

4.   Claims 1, 3 - 6, 8, 11 – 13, 15 – 18, 20 - 22, 24 – 26, 28 – 33, 35, 37 – 45, 48 -

51, 55 - 57, and 61 - 76 are rejected under 35 U.S.C. 102(e) as being disclosed by

Miller et al. (U.S. Pat. No. 6,014,707) (Stateless Data Transfer Protocol With Client

Controlled Transfer Unit Size).

4.1   Regarding claim 40, Miller discloses a method of aggregating data packets, the

method comprising:

determining, based upon the load of a server computer, whether to aggregate

one or more of the data packets into an aggregated data packet with a size, wherein the

size of the aggregated data packet exceeds a minimum threshold size without

exceeding a maximum threshold size, and therein the minimum threshold size or the

maximum threshold size is related to the load of the server computer (Abstract; col. 2,

lines 1 - 8; col. 5, lines 38 - 49); and

transmitting the aggregated data packet to a client computer (Abstract; Fig. 1).

4.2   Per claim 41, Miller teaches that the data packets are not aggregated in an

aggregated data packet larger than the size of a maximum transmission unit for any

intermediary network device that is in the transmission path between the server

computer and the client computer (col. 5, lines 38 - 49).

4.3   Regarding claim 42, Miller discloses determining the server load comprises

comparing the number of data packets that are overdue to the total number of data

packets (col. 8, lines 10 - 21).

4.4   Per claim 43, Miller teaches determining the server load comprises comparing

the number of network events processed by a server program that is executing on the

server computer due to exceeding a time out threshold to the total number of network

events that the server program processes (col. 8, lines 10 - 21).

4.5   Regarding claim 44, Miller does not explicitly disclose that *network events* are

selected from the group comprising: a play command, a pause command, a seek

command, a ping command, and a re-send command (Figs. 7, 8).

4.6   Per claim 45, <u>Miller</u> teaches that the server load is based at least in part upon the

actual transmission rate between the server computer and the client computer (col. 5,

lines 38 - 49).

4.7   Per claim 51, <u>Miller</u> teaches that the size of the minimum threshold relates to a

quality of presentation of the streamable data objects and the maximum threshold

relates to a *maximum transmission unit* (col. 5, lines 38 - 49).

4.8   Regarding claims 1, 3 - 6, 8, 11 – 13, 15 – 18, 20 - 22, 24 – 26, 28 – 33, 35, 37 –

39, 48 - 50, 55 - 57, and 61 - 76, the rejection of claims 40 - 45 and 51 (paragraphs 4.1 -

4.7 above) under 35 USC 102(b) applies fully.

In addition, with regard to claims 15, 16 and 24, 25, <u>Miller</u> discloses that the process of

transmitting the streamable data objects from server to client comprises increasing the

packet size of one or more data packets (col. 5, lines 38 - 49), and either increasing or

decreasing the frequency of transmission of one or more data packets (col. 2, lines 9 -

15); but does not explicitly disclose increasing the number of channels that are used to

transmit the streamable data objects,

The Examiner hereby takes official notice that this feature is commonplace in the

streamable multimedia art in order to increase the speed of transmission, and therefore

does not represent patentably distinct features over the prior art.

5.   Claims 1, 3 - 6, 8, 11 – 13, 15 – 18, 20 - 22, 24 – 26, 28 – 33, 35, 37 – 45, 48 -

51, 55 - 57, and 61 - 76 are rejected under 35 U.S.C. 102(e) as being disclosed by

Shaffer et al. (U.S. Pat. No. 6,003,089) (Method for Constructing Adaptive Packet

Lengths in a Congested Network).

5.1   Regarding claim 40, Shaffer discloses a method of aggregating data packets, the

method comprising:

        determining, based upon the load of a server computer, whether to aggregate

one or more of the data packets into an aggregated data packet with a size, wherein the

size of the aggregated data packet exceeds a minimum threshold size without

exceeding a maximum threshold size, and therein the minimum threshold size or the

maximum threshold size is related to the load of the server computer (Abstract; Fig. 4;

col. 5, lines 1 - 7); and

        transmitting the aggregated data packet to a client computer (Abstract).

5.2   Per claim 41, Shaffer teaches that the data packets are not aggregated in an

aggregated data packet larger than the size of a maximum transmission unit for any

intermediary network device that is in the transmission path between the server

computer and the client computer (col. 7, lines 10 - 13; col. 8, lines 6 - 13).

5.3   Regarding claim 42, <u>Shaffer</u> discloses determining the server load comprises

comparing the number of data packets that are overdue to the total number of data

packets (col. 5, lines 61 - 65).

5.4   Per claim 43, <u>Shaffer</u> teaches determining the server load comprises comparing

the number of network events processed by a server program that is executing on the

server computer due to exceeding a time out threshold to the total number of network

events that the server program processes (col. 5, lines 61 - 65).

5.5   Regarding claim 44, <u>Shaffer</u> does not explicitly disclose that *network events* are

selected from the group comprising: a play command, a pause command, a seek

command, a ping command, and a re-send command.

However, the ping command is inherent in <u>Shaffer</u> because of the determination of

available media (Fig. 2, item 80).

5.6   Per claim 45, <u>Shaffer</u> teaches that the server load is based at least in part upon

the actual transmission rate between the server computer and the client computer (col.

4, lines 40 - 58).

5.7   Per claim 51, <u>Shaffer</u> teaches that the size of the minimum threshold relates to a

quality of presentation of the streamable data objects and the maximum threshold

relates to a *maximum transmission unit* (col. 5, lines 1 - 7).

5.8   Regarding claims 1, 3 - 6, 8, 11 – 13, 15 – 18, 20 - 22, 24 – 26, 28 – 33, 35, 37 –

39, 48 - 50, 55 - 57, and 61 - 76, the rejection of claims 40 - 45 and 51 (paragraphs 5.1 -

5.7 above) under 35 USC 102(e) applies fully.

In addition, with regard to claims 15, 16 and 24, 25, <u>Shaffer</u> discloses that the process

of transmitting the streamable data objects from server to client comprises increasing

the packet size of one or more data packets (col. 5, lines 1 - 7), and either increasing or

decreasing the frequency of transmission of one or more data packets (col. 5, lines 1 -

7); but does not explicitly disclose increasing the number of channels that are used to

transmit the streamable data objects,

The Examiner hereby takes official notice that this feature is commonplace in the

streamable multimedia art in order to increase the speed of transmission, and therefore

does not represent patentably distinct features over the prior art.

Response to Arguments

6.   Applicant's arguments filed 1/20/04 have been fully considered but they are not

persuasive.

Applicant states that Blasbalg does not disclose providing a maximum packet size.

Examiner disagrees.

Blasbalg teaches an equivalent average length of the packets.

Applicant states that Miller fails to determine a maximum transmission unit of an

intermediary device.

Examiner disagrees.

Miller specifically states that "**the server** 12, upon receiving a request, **may further**

reduce the size and rate of **data packets** that will be used for the transfer, **depending**

on the current loads of both the server 12 and the network 10." (col. 5, lines 43 – 47).

Applicant states that Shaffer fails to disclose determining in a server a maximum

transmission unit of an intermediary device between the server and a client.

Examiner disagrees.

Shaffer discloses that the "maximum size here is the **maximum size allowed by the**

network minus the minimum packet size." (col. 8, lines 7 – 9).

Conclusion

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kenneth R Coulter whose telephone number is 703 305-

8447. The examiner can normally be reached on 5 4 9.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Rupal Dharia can be reached on 703 305-4003. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

        Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

KENNETH R. COULTER
PRIMARY EXAMINER

krc